## ABSTRACT OF THE DISCLOSURE

A system for measuring power of a circuit on a printed circuit board (PCB) including first and second circuits, a power strip, a power plane, and a calibration strip. The power strip is connected to the power plane to the first circuit, is embedded in the PCB during the manufacturing process, and also has at least two vias for measuring a voltage drop. The calibration strip is also embedded in the PCB during the manufacturing process and has at least two vias for measuring a voltage drop. The second circuit is configured to measure a voltage drop across the power strip as a first voltage and a voltage drop across the calibration strip as a second voltage, and to calculate the power being fed to the first circuit based on the first voltage and the second voltage.